



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Washington, DC 20090

In Reply Refer To:
4180 (220)

Central California

MEMORANDUM

To: The Secretary

Through: Sylvia V. Baez *Sylvia V. Baez*
Assistant Secretary, Land and Minerals

JUN 13 2000

STANDARDS

From: Director, Bureau of Land Management

for Rangeland Health

Subject: Approval of Central California Standards and Guidelines for Livestock Grazing

In accordance with 43 CFR 4180.2(b), the Acting California State Director is submitting for Secretarial approval the attached Central California Standards and Guidelines for Livestock Grazing. BLM review finds that they comply with the requirements of the regulation. Standards and Guidelines development occurred in consultation with the Central California Resource Advisory Council and with full public participation. BLM analyzed these standards and guidelines in an Environmental Impact Statement (EIS), which was prepared. BLM appropriately considered and addressed the

GUIDELINES

for Livestock Grazing Management

I recommend that you approve the Central California Standards and Guidelines for Livestock Grazing.

I concur with (concur with) your recommendation and (approval) approve the Central California Standards and Guidelines for Livestock Grazing.

Approval: *[Signature]*

Date: JUN 13 2000

Attachment

Prepared by the Bureau of Land Management
California State Office
June 1999

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United States. Department of the Interior



BUREAU OF LAND MANAGEMENT
Washington, D.C. 20240
<http://www.blm.gov>

In Reply Refer To:
4180 (220)

MEMORANDUM

To: The Secretary

Through: Sylvia V. Baca *Sylvia V. Baca* JUN 13 2000
Assistant Secretary, Land and Minerals Management

From: Director, Bureau of Land Management *W. H. H. H. H.*

Subject: Approval of Central California Standards and Guidelines for Livestock Grazing

In accordance with 43 CFR 4180.2(b), the Acting California State Director is submitting for Secretarial approval the attached Central California Standards and Guidelines for Livestock Grazing. BLM review finds that they comply with the requirements of the regulations. Standard and Guidelines development occurred in consultation with the Central California Resource Advisory Council and with full public participation. BLM analyzed these standards and guidelines in an Environmental Impact Statement (EIS), which was protested. BLM appropriately considered and addressed the issues stated in the protests, and used them when it developed the Record of Decision (ROD) following the EIS. The ROD also incorporated the Standards and Guidelines into the appropriate land use plans.

I recommend that you approve the Central California Standards and Guidelines for Livestock Grazing.

I concur with (concur/not concur) with your recommendation and (approve/not approve) the Central California Standards and Guidelines for Livestock Grazing.

Approved: *[Signature]*

Date: JUL 13 2000

Attachment

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United States Department of the Interior



By *[Signature]*
Special Agent in Charge

Office of the Director
Washington, D.C. 20500

MEMORANDUM

To: The Secretary

DATE: JUN 12 1950

Subject: *[Illegible]*
Bureau of Land Management

From: *[Illegible]*
Special Agent in Charge

Re: *[Illegible]*

In accordance with the provisions of the Act of October 3, 1917 (40 Stat. 2909), the Bureau of Land Management is authorized to acquire, hold, and dispose of land for the United States. The Bureau is currently engaged in a study of the land resources of the State of California, and it is requested that you advise the Bureau of the results of your study. The Bureau is particularly interested in the results of your study of the land resources of the State of California, and it is requested that you advise the Bureau of the results of your study. The Bureau is particularly interested in the results of your study of the land resources of the State of California, and it is requested that you advise the Bureau of the results of your study.

I am sure that you will appreciate the Bureau's interest in your study, and I am sure that you will be able to provide the Bureau with the information it needs.

Very truly yours,
Special Agent in Charge

[Signature]
Special Agent in Charge

Approved:

STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

TABLE OF CONTENTS

1. PREAMBLE	1
2. STANDARDS FOR RANGELAND HEALTH	2
STANDARD: SOILS	2
STANDARD: SPECIES	3
STANDARD: RIPARIAN	4
STANDARD: WATER QUALITY	5
3. GUIDELINES FOR GRAZING MANAGEMENT	6
Guideline 1: Livestock grazing operations	6
Guideline 2: Implement grazing systems that regulate the timing and intensity of grazing	6
Guideline 3: On Annual Range, readiness will be determined by	6
Guideline 4: Where appropriate, use grazing systems that maintain the presence and distribution of microsites for seed germination	6
Guideline 5: Perennial plant utilization should be limited to appropriate levels of the current year's growth as indicated in Table A	7
Guideline 6: Implement grazing systems that permit existing native species to complete entire life cycles	7
Guideline 7: Use grazing systems that are compatible with the persistence of desired species	7
Guideline 8: Native species are recommended for all revegetation and enhancement projects	7
Guideline 9: Within identified deer concentration areas there will be no more than 20 percent utilization	8
Guideline 10: Periods of rest from livestock grazing or other avoidable disturbances should be provided during/after episodic events	8
Guideline 11: Grazing management practices will allow for the reproduction of species that will maintain riparian-wetland functions	8
Guideline 12: Grazing practice should maintain a minimum herbage stubble height on all stream-side, riparian and wetland areas	8
Guideline 13: Water sources, wetlands and riparian areas may be fenced to reduce impacts from livestock	9
Guideline 14: The development of water sources will maintain ecologic and hydrologic function and processes	9
Guideline 15: Locate salt blocks and other supplemental feed well away from riparian/wetland areas	9
Guideline 16: Locate new livestock handling and/or management facilities outside of riparian/wetland areas	9
Guideline 17: Implement grazing systems that will promote compliance with the Water Quality Standards	9
Guideline 18: The plan for grazing on any allotment must consider other uses	9
Table A: Forage Utilization and Mulch Management Requirements	10

TABLE OF CONTENTS

1. PREFACE	1
2. STANDARD FOR WATER AND HEALTH	2
STANDARD FOR WATER	2
STANDARD FOR WATER	2
STANDARD FOR WATER	2
STANDARD FOR WATER	2
3. GUIDELINES FOR THE WATER MANAGEMENT	3
Guideline 1: The water supply should be sufficient for the population of the area.	3
Guideline 2: The water supply should be of good quality and free from harmful substances.	3
Guideline 3: The water supply should be of sufficient quantity to meet the needs of the population.	3
Guideline 4: The water supply should be of sufficient quality to meet the needs of the population.	3
Guideline 5: The water supply should be of sufficient quantity to meet the needs of the population.	3
Guideline 6: The water supply should be of sufficient quality to meet the needs of the population.	3
Guideline 7: The water supply should be of sufficient quantity to meet the needs of the population.	3
Guideline 8: The water supply should be of sufficient quality to meet the needs of the population.	3
Guideline 9: The water supply should be of sufficient quantity to meet the needs of the population.	3
Guideline 10: The water supply should be of sufficient quality to meet the needs of the population.	3
Guideline 11: The water supply should be of sufficient quantity to meet the needs of the population.	3
Guideline 12: The water supply should be of sufficient quality to meet the needs of the population.	3
Guideline 13: The water supply should be of sufficient quantity to meet the needs of the population.	3
Guideline 14: The water supply should be of sufficient quality to meet the needs of the population.	3
Guideline 15: The water supply should be of sufficient quantity to meet the needs of the population.	3
Guideline 16: The water supply should be of sufficient quality to meet the needs of the population.	3
Guideline 17: The water supply should be of sufficient quantity to meet the needs of the population.	3
Guideline 18: The water supply should be of sufficient quality to meet the needs of the population.	3
Guideline 19: The water supply should be of sufficient quantity to meet the needs of the population.	3
Guideline 20: The water supply should be of sufficient quality to meet the needs of the population.	3

STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

1. PREAMBLE

The standards for rangeland health and guidelines for livestock management on Bureau of Land Management lands are written to accomplish the four fundamentals of rangeland health, insofar as the standards are affected by livestock grazing practices. Those fundamentals are:

- A. Watersheds are properly functioning;
- B. Ecological processes are in order;
- C. Water Quality complies with State standards; and,
- D. Habitats of protected species are in order.

A "standard" serves as the criterion to determine if management actions are resulting in the maintenance or attainment of healthy rangelands per the four fundamentals of rangeland health. Standards are expressions of physical and biological conditions or degree of function required for healthy, sustainable rangelands. "Guidelines" serve as the vehicle to implement management actions related to livestock grazing to accomplish rangeland health standards. Guidelines will indicate the types of grazing methods and practices determined to be appropriate to ensure that standards can be met. The public should be an active participant in the application of these standards and guidelines.

Standards and guidelines will apply to all BLM lands within the geographic area for which they are written. Using the complete set of standards and guidelines, the local BLM range managers, in consultation with grazing permittees and other interested parties, will determine "terms and conditions" for each grazing allotment. These terms and conditions are the specific grazing practices that are appropriate for that allotment.

BLM lands vary so greatly in topography, climate, soils, water availability, size and distribution of parcels, and other factors, that local managers must have the flexibility needed to determine which grazing practices will work best in each area, and to change those practices when necessary to achieve the desired rangeland conditions.

The scientific evidence and collective knowledge of the public and rangeland managers show a wide variety of grazing effects on plants, animals and watersheds. As a result, the application of these standards and guidelines will emphasize using the best available information for a site-specific situation, and the results of historical grazing patterns should be given significant weight in any decisions about grazing practices to be followed on BLM allotments. Where historical grazing use has been compatible with meeting the standards for soils, species, riparian areas or water quality, no permanent changes should be mandated in the existing grazing patterns without substantial scientific evidence that changing the existing grazing pattern will improve the ability to achieve the standards.

STANDARD AND CIVILIAN IN RACIAL AND ETHNIC
IN CALIFORNIA

1. INTRODUCTION

The purpose of this study is to provide a comprehensive overview of the current state of racial and ethnic diversity in California. This report will examine the demographic trends, social issues, and policy implications related to the state's diverse population.

- A. Historical context and background
- B. Current demographic trends
- C. Social and economic challenges
- D. Policy recommendations

The following sections will provide a detailed analysis of the data and issues identified in the study. The first section, 'Historical context and background', will explore the long-standing patterns of immigration and settlement in California. The second section, 'Current demographic trends', will present the latest statistics on the state's population composition. The third section, 'Social and economic challenges', will discuss the disparities and inequalities that exist among different racial and ethnic groups. Finally, the fourth section, 'Policy recommendations', will offer suggestions for addressing these challenges and promoting a more equitable and inclusive society.

The study was conducted using a combination of quantitative and qualitative research methods. Data was collected from various sources, including government records, academic studies, and community surveys. The findings of the study are presented in the following sections, which provide a comprehensive overview of the current state of racial and ethnic diversity in California.

In addition to the main body of the report, there are several appendices that provide further information on the study. Appendix A contains a list of the sources used in the research. Appendix B provides a detailed breakdown of the data by county. Appendix C contains a glossary of terms used throughout the report.

The study was conducted over a period of six months, during which time a large amount of data was collected and analyzed. The findings of the study are presented in the following sections, which provide a comprehensive overview of the current state of racial and ethnic diversity in California. The study was conducted using a combination of quantitative and qualitative research methods. Data was collected from various sources, including government records, academic studies, and community surveys. The findings of the study are presented in the following sections, which provide a comprehensive overview of the current state of racial and ethnic diversity in California.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

For any standard, guideline, term, or condition to work, it must be capable of being achieved, based on sound science or good common sense, and be measurable, understandable, and economically feasible. There is no use in setting standards that cannot be met.

Successful application of these standards and guidelines will depend on BLM's capability to monitor rangeland conditions and implement management practices. Each Bureau office should develop a monitoring and implementation plan that sets priorities based on resource conditions, trends, and resource values.

2. STANDARDS FOR RANGELAND HEALTH

STANDARD: SOILS

Soils exhibit functional biological and physical characteristics that are appropriate to soil type, climate, and land form.

Meaning That:

Precipitation is able to enter the soil surface at appropriate rates; the soil is adequately protected against accelerated erosion; and the soil fertility is maintained at appropriate levels.

As Indicated By:

- * Ground cover (vegetation and other types of ground cover such as rock) is sufficient to protect sites from accelerated erosion.
- * Litter/residual dry matter is evident, in sufficient amounts to protect the soil surface.
- * A diversity of plant species, with a variety of root depths, is present and plants are vigorous during the growing season.
- * There is minimal evidence of accelerated erosion in the form of rills, gullies, pedestaling of plants or rocks, flow patterns, physical soil crusts/surface sealing, or compaction layers below the soil surface.
- * Biological (microphytic or cryptogamic) soil crusts are in place where appropriate.

STANDARD FOR PACKAGED HEATERS

For any standard heater, there are certain things which it must be capable of doing, and these are listed below. It is the purpose of this standard to set forth the minimum requirements for such heaters, and to provide a basis for the comparison of different heaters.

The standard heater is defined as a heater which will deliver an output of 100,000 Btu per hour at a pressure of 100 lb. per sq. in. at a temperature of 200°F. The standard heater is also defined as a heater which will deliver an output of 100,000 Btu per hour at a pressure of 100 lb. per sq. in. at a temperature of 200°F.

1. STANDARD FOR PACKAGED HEATERS

STANDARD 101

A standard heater is defined as a heater which will deliver an output of 100,000 Btu per hour at a pressure of 100 lb. per sq. in. at a temperature of 200°F.

General

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As indicated by

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STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

STANDARD: SPECIES

Viable, healthy, productive, and diverse populations of native and desired species, including special status species (Federal T&E, Federal proposed, Federal candidates, BLM sensitive, or Calif. State T&E) are maintained or enhanced where appropriate.

Meaning That:

Native and other desirable plant and animals are diverse, vigorous, able to reproduce and support the hydrologic cycle, nutrient cycles, and energy flows over space and time.

As Indicated By:

- * Wildlife habitats include seral stages, vegetation structure, and patch size to promote diverse and viable wildlife populations.
- * A variety of age classes are present for most perennial plant species.
- * Plant vigor is adequate to maintain desirable plants and ensure reproduction and recruitment of plants when favorable climatic events occur.
- * The spatial distribution and cover of plant species and their habitats allows for reproduction and recovery from localized catastrophic events.
- * A diversity of plant species with various phenological stages and rooting depths are present on sites where appropriate.
- * Appropriate natural disturbances are evident.
- * Levels of non-native plants and animals are at acceptable levels.
- * Special status species present are healthy and in numbers that appear to ensure stable to increasing populations; habitat areas are large enough to support viable populations or are connected adequately with other similar habitat areas.
- * Adequate organic matter (litter and standing dead plant material) is present for site protection and decomposition to replenish soil nutrients.
- * Where appropriate, biological soil crusts (also called microphytic or cryptogamic soil crusts) are present and not excessively fragmented.
- * Noxious and invasive species are contained at acceptable levels.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

STANDARD: RIPARIAN

Riparian/wetland vegetation, structure and diversity, and stream channels and floodplains are functioning properly, and meeting regional and local management objectives.

Meaning That:

The vegetation and soils interact to capture and pass sediment, sustain infiltration, maintain the water table, stabilize the channel, sustain high water quality, and promote biodiversity appropriate to soils, climate, and landform.

As Indicated By:

Vegetation Attributes:

- * Vegetation cover is greater than 80% or the percentage that will protect banks and dissipate energy during high flows.
- * Age-class and structure of woody/riparian vegetation are diverse and appropriate for the site.
- * Where appropriate, shading is sufficient to provide adequate thermal regulation for fish and other riparian dependent species.
- * Where appropriate, there is adequate woody debris.
- * A diversity of plant species with various phenological stages and rooting depths is present. Root masses are sufficient to stabilize stream banks and shorelines.
- * Plant species present indicate that soil moisture characteristics are being maintained.
- * There is minimal cover of invader/shallow-rooted species.
- * Adequate organic matter (litter and standing dead plant material) is present to protect the site and to replenish soil nutrients through decomposition.
- * Point bars are vegetated.

Physical Indicators:

- * Streambank stability, pool frequency, substrate sediments, stream width, and bank angles are appropriate for the stream type.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

STANDARD: WATER QUALITY

Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California State standards.

Management Objective: For water bodies, the primary objective is to maintain the existing quality and beneficial uses of water, protect them where they are threatened (and livestock grazing activities are a contributing factor), and restore them where they are currently degraded (and livestock grazing activities are a contributing factor). This objective is of even higher priority in the following situations:

- (a) where beneficial uses of water bodies have been listed as threatened or impaired pursuant to Section 303(d) of the Federal Clean Water Act;
- (b) where aquatic habitat is present or has been present for Federal threatened or endangered, candidate, and other special status species dependent on water resources; and,
- (c) in designated water resource sensitive areas such as riparian and wetland areas.

Meaning That:

BLM will, pursuant to the Clean Water Act:

Maintain the physical, biological, and chemical integrity of waters flowing across or underlying the lands it administers;

Protect the integrity of these waters where it is currently threatened;

Insofar as is feasible, restore the integrity of these waters where it is currently impaired;

Not contribute to pollution and take action to remedy any pollution resulting from its actions that violates applicable California (including the requirements identified in Regional Basin Plans), or Tribal water quality standards or other applicable water quality requirements (e.g., requirements adopted by SWRCB or RWQCB in California, or US EPA pursuant to Section 303(d) of the Clean Water Act or the Coastal Zone Reauthorization Act). Where action related to grazing management is required, such action will be taken as soon as practicable but not later than the start of the next grazing year (in accordance with 43 CFR 4180.1).

Be consistent with the non-degradation policies identified in the Regional Basin Plans in California.

Work with the State (including the Regional Water Quality Control Boards) and U.S. EPA to establish appropriate beneficial uses for public waters, establish appropriate numeric targets for 303(d)-listed water bodies, and implement the applicable requirements to ensure that water quality on public lands meets the criteria for the designated beneficial uses of the water.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

Develop and implement Best Management Practices (BMPs) approved by the SWRCB to protect and restore the quality and beneficial uses of water, and monitor both implementation and effectiveness of the BMPs. These BMPs will be developed in full consultation, coordination, and cooperation with permittees and other interests.

As Indicated By:

- * The following do not exceed the applicable requirements: chemical constituents, water temperature, nutrient loads, fecal coliform, turbidity, suspended sediment, and dissolved oxygen.
- * Achievement of the standards for riparian, wetlands, and water bodies.
- * Aquatic organisms and plants (e.g., macroinvertebrates, fish, algae, and plants) indicate support for beneficial uses.
- * Monitoring results or other data that show water quality is meeting the standard.

3. GUIDELINES FOR GRAZING MANAGEMENT

Guideline 1: Livestock grazing operations will be conducted so that progress is made toward maintaining or promoting adequate amounts of vegetative ground cover, including standing plant material and litter to support infiltration and permeability, and maintain soil moisture storage and soil stability appropriate for the ecological sites within the management units. The ground cover should maintain soil organisms, plants, and animals to support the hydrologic and nutrient cycles, and energy flow.

Guideline 2: Implement grazing systems that regulate the timing and intensity of grazing. Continuous season-long grazing use is allowed if it has been demonstrated that it can be consistent with achieving a healthy, properly functioning ecosystem. Grazing systems should specify season of use based on plant phenology and geohydrologic processes where appropriate. On annual rangelands, mulch management should be used to define target forage use levels that will ensure that sufficient amounts of residual dry matter (RDM) or standing plant material will be maintained throughout the grazing season. Mulch levels for annual grasses should meet the requirements of Table A, whenever feasible. Mulch levels will include a "buffer" to account for RDM loss from other natural processes (decomposition, animal use, etc.). Exceptions may be approved during the green season when substantial regrowth is expected or if lower RDM levels are required to meet particular rangeland health objectives, such as reducing competition for a desired species.

Guideline 3: On Annual Range, readiness will be determined by: (1) Minimum RDM levels at the time of turnout prior to green season growth are exceeded by 200 pounds per acre; or (2) Minimum RDM levels and at least 2 inches of new growth are present in the growing season.

Guideline 4: Where appropriate, use grazing systems that maintain the presence and distribution of microsites for seed germination.

STANDARD AND CRITERIA FOR RESIDENTIAL BEACH TRAIL CALIFORNIA

Design and engineering firm management practices (BMPs) approved by the SWRCB to protect and restore the quality and quantity of water and monitor both implementation and effectiveness of the BMPs. These BMPs will be developed in full consultation, coordination and cooperation with local, state and federal agencies.

As indicated by:

- * The following are not covered by applicable regulatory environmental assessment water management, water quality, local water use, the city, watershed, regional, and global water.
- * Addressing the standards for riparian, wetlands, and water bodies.
- * Addressing the standards for riparian, wetlands, and water bodies.
- * Addressing the standards for riparian, wetlands, and water bodies.

2. CRITERIA FOR THE BEACH TRAIL

Criterion 1: A project that is consistent with the standards for riparian, wetlands, and water bodies in the project area, and that is consistent with the standards for riparian, wetlands, and water bodies in the project area, and that is consistent with the standards for riparian, wetlands, and water bodies in the project area.

Criterion 2: A project that is consistent with the standards for riparian, wetlands, and water bodies in the project area, and that is consistent with the standards for riparian, wetlands, and water bodies in the project area, and that is consistent with the standards for riparian, wetlands, and water bodies in the project area.

Criterion 3: A project that is consistent with the standards for riparian, wetlands, and water bodies in the project area, and that is consistent with the standards for riparian, wetlands, and water bodies in the project area, and that is consistent with the standards for riparian, wetlands, and water bodies in the project area.

Criterion 4: A project that is consistent with the standards for riparian, wetlands, and water bodies in the project area, and that is consistent with the standards for riparian, wetlands, and water bodies in the project area, and that is consistent with the standards for riparian, wetlands, and water bodies in the project area.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

Guideline 5: Perennial plant utilization should be limited to appropriate levels of the current year's growth as indicated in Table A, unless it has been proven that this level of use is incompatible with the continued existence of the plant.

Management changes will be implemented (e.g., reductions in stocking rate or another management change) if utilization guidelines on the average of the upland key areas across the pasture (or allotment if there is only one pasture) are exceeded for 2 consecutive years or in any 2 years out of every 5 years. In addition, at least 70% of upland key areas on the pasture (or allotment) are not to exceed maximum utilization guidelines in most years. Because of the potential long-term damage to perennial grass species associated with severe grazing, severe grazing use (>70% utilization) in any upland key area in any year will result in a management change the following year. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents. The average (mean) utilization on key species will be estimated at each key area and used to determine if the guidelines have been met. There are indications that the median may be a better statistic to use than the mean; we will calculate both statistics from the same data sets and make a determination on which statistic to use after examining the data over a period of a few years. See Appendix 20 of the FEIS for further discussion on this issue.

For allotments not meeting or making significant progress toward meeting the standards (and for which lower utilization levels of perennial upland species would be expected to help move these allotments toward the standards), utilization data already in hand will be used to determine whether a management change is necessary. Thus, for example, if utilization on a particular key area has exceeded the thresholds of Table A for the two years previous to the approval of these standards and guidelines, a management change will be implemented prior to the first grazing year following this approval. In addition to implementing management changes that are expected to bring utilization levels within threshold values, close monitoring will follow to ensure that the grazing use levels are not exceeded during the grazing period following the management changes. If utilization levels are exceeded or expected to be exceeded during this period, a reduction or curtailment of further grazing in the area represented by the key area will be required for the remainder of the grazing season. In addition, further management changes will be implemented prior to the start of the next grazing season to bring utilization levels within thresholds.

Guideline 6: Implement grazing systems that permit existing native species to complete entire life cycles and sustain the spatial distribution of microsites necessary for seed germination at intervals sufficient to maintain the viability of the species.

Guideline 7: Use grazing systems that are compatible with the persistence of desired species. Grazing use should provide appropriate levels of plant matter that will promote the existence of desirable plants and animals.

Guideline 8: Native species are recommended for all revegetation and enhancement projects unless they are not readily available in sufficient quantities or are incapable of maintaining or achieving properly functioning conditions and biological health.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

Guideline 9: Within identified deer concentration areas there will be no more than 20 percent utilization of annual growth on key browse species prior to October 1.

Guideline 10: Periods of rest from livestock grazing or other avoidable disturbances should be provided during/after episodic events (e.g., flood, fire, drought) and during critical times of plant growth needed to achieve proper functioning conditions, recovery of vegetation, or desired plant community.

Guideline 11: Grazing management practices will allow for the reproduction of species that will maintain riparian-wetland functions, including energy dissipation, sediment capture, groundwater recharge, streambank stability, the hydrologic cycle, nutrient cycle, and energy flow.

Guideline 12: Grazing practice should maintain a minimum herbage stubble height on all stream-side, riparian and wetland areas at the end of the growing season. There should be sufficient residual stubble or regrowth at the end of the growing season to meet the requirements of plant vigor maintenance, bank protection, and sediment entrapment (Table A).

Management changes will be implemented (e.g., reductions in stocking rate or another management change) if stubble heights on the average of the key riparian areas across the pasture (or allotment if there is only one pasture) fall below the guidelines for 2 consecutive years or in any 2 years out of every 5 years. In addition, at least 70% of riparian key areas on the allotment are to exceed minimum stubble heights in most years. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents. Because stream banks may be inadequately protected by heavy use in any one year and because stubble heights below 3 inches result in cattle shifting their preference to shrubs, stubble heights below 2 inches in any one year will require a management change in the following year.

The mean stubble height on key riparian species will be estimated at each riparian key area and used to determine if the guidelines have been met. There are indications that the median may be a better statistic to use than the mean; we will calculate both statistics from the same data sets and make a determination on which statistic to use after examining the data over a period of a few years. See Appendix 20 of the Final EIS for further discussion on this issue.

For allotments not meeting or making significant progress toward meeting the standards (and for which higher stubble would be expected to help move these allotments toward the standards), stubble height data already in hand will be used to determine whether a management change is necessary. Thus, for example, if stubble heights on a particular key area have fallen below the thresholds of Table A for the two years previous to the approval of these standards and guidelines, a management change will be implemented prior to the first grazing year following this approval. In addition to implementing management changes that are expected to bring stubble heights within threshold values, close monitoring will follow to ensure the grazing use levels are not exceeded during the grazing period following the management changes. If utilization levels are exceeded or expected to be exceeded during this period, a reduction or curtailment of further grazing in the area represented by the key area will be required for the remainder of the grazing season. In addition, further management changes will be implemented prior to the start of the next grazing season to bring utilization levels within thresholds.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

Guideline 13: Water sources, wetlands and riparian areas may be fenced to reduce impacts from livestock.

Guideline 14: The development of water sources will maintain ecologic and hydrologic function and processes.

Guideline 15: Locate salt blocks and other supplemental feed well away from riparian/wetland areas.

Guideline 16: Locate new livestock handling and/or management facilities outside of riparian/wetland areas. For existing livestock handling facilities inside riparian areas, ensure that facilities do not prevent attainment of standards. Limit livestock trailing, bedding, watering, loading, and other handling efforts to those areas and times that will not retard or prevent attainment of standards.

Guideline 17: Implement grazing systems that will promote compliance with the Water Quality Standards.

- a. Apply the management practices recognized and approved by the State of California as Best Management Practices (BMPs) for grazing related activities to protect and maintain water quality.
- b. In watersheds draining into water bodies that have been listed or are proposed for listing as having threatened or impaired beneficial uses, and where grazing activities may contribute to the pollutants causing such impairment, the management objective is to fully protect, enhance, and restore the beneficial uses of the water.

Guideline 18: The plan for grazing on any allotment must consider other uses (recreation, wildlife, mineral resource development, etc.) and be coordinated with other users of the public lands so that overall use does not detract from the goal of achieving rangeland health.

Guideline 13: When natural wetlands and riparian areas may be needed to reduce impacts from livestock.

Guideline 14: The development of water sources will consider ecological and hydrologic function and riparian areas.

Guideline 15: Locate all tanks and other supplemental feed well away from riparian/wetland areas.

Guideline 16: Locate all livestock handling and/or management facilities outside of riparian/wetland areas. For a range of livestock handling facilities, consider the location of the facility to not prevent environmental impacts. Avoid livestock handling, feeding, watering, and other handling activities in riparian areas and areas that are used for environmental purposes.

Guideline 17: Implement riparian zone revegetation and willow management with the Water Quality Standards.

a. Apply the riparian zone revegetation and willow management standards of the State of California as required by the California Department of Water Resources (DWR) for riparian zone revegetation to protect and maintain water quality.

b. In riparian areas, the water body or that have been used or are proposed for being as having riparian or riparian benefits and willow management activities may contribute to the riparian zone revegetation. The management objective is to fully protect riparian and riparian benefits and uses of the water.

Guideline 18: The plan for grazing on any riparian area should also include riparian revegetation. Riparian revegetation should be implemented with other riparian management activities to the extent possible. Riparian revegetation should be implemented in the riparian zone.

STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA

Table A: Forage Utilization and Mulch Management Requirements				
Precipitation	Plant Community	Slope, Elevation	Minimum Residual Dry Matter* (lbs/ac)	Maximum Utilization of Key Perennials, #, ##
4-10 Inches	California annual grassland	<25% 25-45% >45%	200 250 350	25-40%
10-40 Inches	California annual grassland, Oak woodlands	<25% 25-45% >45% <15%, 1000-2500' >15%, >2500'	400 600 800 700-900** 1000-1200**	30-45%
8-30 Inches	Sagebrush grassland, semi-desert grass and shrubland, Pinyon-juniper woodland, Cool season pasture	NA	NA	30-40%
	Coniferous forest, mountain shrubland	NA	NA	30-40%
	Alpine tundra	NA	NA	20-30%
	Salt Desert Shrubland	NA	NA	25-35%
4-40 Inches	Riparian areas, wetlands	NA	4-6 inch stubble height #	35-45% herbs, 10-20% shrubs, 0-20% trees

* Minimum to be present at fall/winter green-up.

** Higher minimum is for sites that are: in unsatisfactory condition, grazed during active growth, not rested, or on steeper slopes.

Stubble height and percent utilization levels are initial values that should be adjusted to consider timing of grazing use and plant phenology, resource conditions and a site's resiliency at the allotment, pasture or site-specific location. Perennial plant utilization levels and stubble heights are based on a literature review by Holechek (1988, 1991), Holechek et al. (1998) and Willoughby (see the Annotated Bibliography on Utilization in the FEIS).

On sites in unsatisfactory condition and/or trend, perennial plant utilization should be no more than 15-25% current annual growth where less than one period of rest is provided per growing season of use.

IMPLEMENTATION

The fall-back standards (CPR 4150.201) have been in effect since August 12, 1991. As a result, scoring of allotments was made based on existing information to determine the status of each allotment with respect to meeting the fall-back standards. Each allotment was placed into one of four categories as follows:

- Category 1: Allotments where one or more standards are not being met or significant progress is not being made toward meeting the standards, and livestock grazing is a significant contributor to the problem.
- Category 2: Allotments where all standards are being met, or significant progress is being made toward meeting the standards.
- Category 3: Allotments where the status of one or more standards is not known, or the status of the allotment is not met (the standards) is not known.
- Category 4: Allotments where one or more of the standards are not being met or significant progress is not being made toward meeting the standards, but no other information is available to determine the status of the allotment. (These allotments where significant progress is also being made toward meeting the standards are included in Category 1 in addition to this category.) The substandard effort should be appropriate action based on regulation or policy; however, these actions are not related to livestock grazing and outside the scope of the implementation plan and will not be reviewed in this document.

An assumption has been made by the BLM field managers that with few possible exceptions, the implementation needed for the regulatory fall-back standards and guidelines will eventually be the same as for any other standard or guideline approved and published in the Federal Register. Consequently, the categorization of allotments under the standards in this ROP is likely to be the same as the categorization under the fall-back standards and guidelines. Existing allotment procedures and their resulting determinations as to category will be reviewed to ensure the categorization is correct under the standards set in place by this ROP.

New allotment assessments, reviews of existing allotment assessments, and determinations of allotment category will be conducted in full consultation, coordination, and cooperation with permittees and other interested parties.

We intend to conduct assessments on all allotments within the next 5 years. First priority for these allotment assessments will be given to those allotments where we already know or suspect one or more of the standards is not being met. These include those allotments placed in Category 1 under the

**IMPLEMENTATION of
STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA**

fallback standards and those allotments currently in Category 3 that we have reason to believe may not be meeting standards. After these allotments have been assessed, the remaining allotments will be assessed using the BLM I, M, and C priority management system, with first priority to I, second to M, and last to C.

For those allotments where the standards are not being met (Category 1), management actions will be implemented to correct the situation prior to the next grazing season turn-out period for the allotment. The management options will be determined in full coordination, consultation, and cooperation with permittees and other interests.

Monitoring will be conducted to evaluate the progress towards improving rangeland health and to evaluate the success of the specific management measures applied.

APPLICATION OF GUIDELINES

Once the guidelines are approved by the Secretary of the Interior, they will be applicable to the management of livestock grazing on all allotments not meeting the health standards. Some guidelines will be applicable regardless of the specific rangeland health condition, as they are designed to help protect and sustain rangeland health and are not intended to be applied only to remedy problems. Many of the guidelines will need to be more specifically identified and then applied as terms and conditions of a permit or lease, based upon the specific needs for meeting rangeland health standards. There will be instances where specific terms and conditions will be applied to grazing use authorizations for reasons other than those directly related to rangeland health, such as to accommodate other resource needs and land uses or to meet administrative requirements. Examples of this may include protecting cultural resource sites, requiring a specific breed of livestock to be used that is compatible with the needs of other permittees or lessees using the same allotment, or for meeting various regulatory requirements for grazing administration purposes. In some instances, existing terms and conditions will be carried over from previously made plans and commitments, such as those identified in allotment management plans or coordinated management plans. In these instances, the terms and conditions may or may not be related to rangeland health needs.

Any terms or conditions specified for a permit or lease must be consistent with and support appropriate BLM land use plans or other land use plans applicable to the public lands. BLM will also adhere to requirements such as those identified as terms or conditions from a biological opinion for protecting the habitat of a plant or animal under the Endangered Species Act.

Terms and conditions will be applied to grazing permits, leases, or other grazing authorizations as the authorized officer (Field Manager) determines the need. The determination of what terms and conditions will be applied will be made in consultation with the respective permittees/lessees and other interested parties involved in the particular allotment. The same process will be used for making

**IMPLEMENTATION of
STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA**

needed changes to any existing terms and conditions. Information from assessments and evaluations of monitoring data will be used to determine the management changes needed. Management options that would be expected to move allotments toward meeting the standards will be determined in full coordination, consultation, and cooperation with permittees/lessees and other interested parties.

Alternative management changes will be considered and evaluated through the NEPA process prior to making final determinations. It is anticipated that in most instances, the terms and conditions will be identified cooperatively and be agreed upon by the affected permittee/lessee and all interested parties. Where an agreement cannot be reached, then a formal decision (which is appealable) will be issued.

If reductions in permitted use are necessary to achieve the standards or meet the guidelines, the animal unit months (AUMs) by which the permitted use is reduced will be held in suspension. Once the authorized officer determines that rangeland health has recovered to an extent that all or part of the suspended permitted use can be restored, this suspended permitted use shall first be apportioned in satisfaction of suspended permitted use to the permittee(s) or lessee(s) authorized to graze in the allotment in which the forage is available (this is in accordance with 43 CFR 4110.3-1(b)).

STANDARDS AND CRITERIA FOR THE HEALTH OF THE CENTRAL ALASKA
INDEPENDENT

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**IMPLEMENTATION of
STANDARDS AND GUIDELINES for RANGELAND HEALTH in CENTRAL CALIFORNIA**

REPORTING PROGRESS IN RANGELAND HEALTH ACHIEVEMENTS

Rangeland health conditions will be reported annually for each grazing allotment. This information will include the determinations of rangeland health conditions through assessments and monitoring and the progress made towards meeting rangeland health standards. At a minimum the report will identify, by allotment: (1) what standards, if any, are not being met; (2) whether significant progress is being made toward meeting those standards that are not currently being met; (3) the magnitude of those standards not being met, in terms such as acres, miles of stream, number of sites, etc.; (4) the progress that has been made in determining and implementing needed management changes; and (5) the results of making the management changes as determined from monitoring and assessment information. Additionally, any changes in the management categories of the allotments will be identified, accompanied by an explanation of the reasons for the change.

The above information will be gathered at the field office which administers the respective allotment(s). A summary of this information will be consolidated for all of the allotments within the EIS area and made available to the public annually.

Tables were provided in the Final EIS that showed all allotments in the State and the category to which they were assigned in 1997. Since that list was compiled, management changes have been implemented and additional assessment and monitoring work has been completed that makes those lists obsolete. When the annual report is compiled each year, an updated list of all allotments, by category, will be provided as part of the report.

Throughout all processes the public is encouraged to participate in the identification of rangeland health conditions, developing management remedies, monitoring results, and reviewing progress towards achieving rangeland health standards.

REPORTING PROGRESS IN RANGELAND HEALTH ACHIEVEMENTS

Rangeland health conditions will be reported annually for each grazing allotment. The information will include the determination of rangeland health conditions through assessment and monitoring and the progress made towards meeting rangeland health standards. At a minimum the report will identify, by allotment: (1) what standards it met, are not being met; (2) whether significant progress is being made toward meeting those standards that are not currently being met; (3) the magnitude of those standards not being met, in terms such as acres, miles of stream, number of acres, etc.; (4) the progress that has been made in determining and implementing needed management changes; and (5) the results of making the management changes as determined from monitoring and assessment information. Additionally, any changes in the management categories of the allotment will be identified, accompanied by an explanation of the reasons for the change.

The above information will be gathered at the field office which administers the respective allotment(s). A summary of this information will be considered for all of the allotments within the FWS area and made available to the public through the public agency.

Tables were provided in the Final EIS that showed all allotments in the State and the category in which they were assigned in 1997. Since that time, management changes have been implemented and additional assessment and monitoring work has been completed that makes these data obsolete. With the next report a completed each year, an updated list of all allotments by category will be provided as part of the report.

Throughout all processes the public is encouraged to participate in the determination of rangeland health conditions, developing management strategies, reviewing results, and reviewing progress towards meeting rangeland health standards.